Claims 1-19 [Canceled].

20. [New] In a pipeline having a plurality of longitudinal pipe sections, a joint mechanism coupling two such sections, comprising:

the pipe sections having outwardly flanged end portions;

means holding the outer end surfaces of the pipe sections in abutting and sealing relationship, the flanged end portions then also providing an annular space to receive a coupling ring;

a coupling ring disposed within the annular space and having an inner diameter conforming to the diameter of the pipe sections, the coupling ring also having longitudinally tapered outer end surface portions;

each pipe section also containing a cylindrical lining member covering the inner wall surface of the pipe section;

the end portions of the respective liners extending into the annular space in contact with respective tapered outer surfaces of the coupling ring, the liner ends not being in physical contact with each other; and

the annular space permitting fluid or gas that may be moving within the liner of one pipe section to flow around the outer circumference of the coupling ring and into the liner of the other pipe section.

21. [New] Apparatus as in Claim 20 wherein each lining member has longitudinal grooves on its outer wall surface to permit fluid or gas that may seep through the liner to move within the grooves longitudinally of the associated pipe section.

22. [New] A joint mechanism as in Claim 20 wherein the holding means also clamps the coupling ring in tight engagement with the outer end portions of the liners.

23. [New] A joint mechanism as in Claim 20 which further includes a pair of flow rings encasing the end portions of respective liners, the flow rings having mutually aligned openings to permit fluid or gas moving within the liner of one pipe section to flow around the outer circumference of the coupling ring and into the liner of the other pipe section.

24. [New] A joint mechanism as in Claim 21 wherein the holding means also clamps the coupling ring in tight engagement with the outer end portions of the liners.

25. [New] A joint mechanism as in Claim 21 which furkther includes a pair of flow rings encasing the end portions of respective liners, the flow rings having mutually aligned openings to permit fluid or gas moving within the liner of one pipe section to flow around the outer circumference of the coupling ring and into the liner of the other pipe section.

26. [New] Apparatus as in Claim 22 wherein each lining member has longitudinal grooves on its outer wall surface to permit fluid or gas that may seep through the liner to move within the grooves longitudinally of the associated pipe section.

27. [New] In a pipeline having a plurality of longitudinal pipe sections, a joint mechanism coupling two such sections, comprising:

each pipe section containing a lining member that covers the inner wall surface of the pipe section, both the pipe sections and their associated liners having outwardly flanged end portions;

the flanged end portions of the pipe sections and liners also providing an annular space to receive a coupling ring;

a coupling ring disposed within the annular space, and having longitudinally tapered outer end surface portions that supportingly engage the flared end portions of the liners, the liner ends not being in physical contact with each other;

means holding the outer end surfaces of the pipe sections in abutting and sealing relationship; and

the annular space permitting fluid or gas that may be moving within the liner of one pipe section to flow around the outer circumference of the coupling ring and into the liner of the other pipe section.

28. [New] Apparatus as in Claim 27 wherein each lining member has longitudinal grooves on its outer wall surface to permit fluid or gas that may seep through the liner to move within the grooves longitudinally of the associated pipe section.

29. [New] A joint mechanism as in Claim 27 which further includes a pair of flow rings encasing the end portions of respective liners, the flow rings having mutually aligned openings to permit fluid or gas moving within the liner of one pipe section

to flow around the outer circumference of the coupling ring and into the liner of the other pipe section.

30. [New] A joint mechanism as in Claim 28 which further includes a pair of flow rings encasing the end portions of respective liners, the flow rings having mutually aligned openings to permit fluid or gas moving within the liner of one pipe section to flow around the outer circumference of the coupling ring and into the liner of the other pipe section.

31. [New] A joint mechanism as in Claim 30 wherein the holding means also clamps the flow rings in tight engagement with the outer end surfaces of the liners, and the coupling ring in tight engagement with their inner end surfaces.

32. [New] The method of joining and securely sealing together the ends of two steel pipe sections that contain gas-permeable interior liners, comprising the steps of:

forming the end portions of both the pipe sections and their associated liners into an outwardly flared configuration so as to provide an annular space for receiving a coupling ring between the joined ends of two such pipe sections;

selecting a coupling ring having an interior circumferential surface conforming to the interior space of the pipe sections, having longitudinally sloped outer end surfaces to receive the flared end portions of the liners, and having a radially protruding circumferential shoulder intermediate its two ends;

placing the coupling ring within the annular space so that its radially protruding circumferential shoulder provides longitudinal separation between the ends of the liners while its sloped end surfaces engage and receive the flared end portions of the liners; and

leaving a radial space about the coupling ring to allow fluid or gas flowing longitudinally within the liner of one of the pipe sections to flow about the circumferential shoulder of the coupling ring and hence into the liner of the other pipe section.

33. [New] The method of Claim 32 wherein a pair of flow rings are utilized to encase the end portions of respective liners, which have mutually aligned openings to permit the flow of fluid or gas.